ABSTRACT

METHOD TO GENERATE A PSEUDO_RANDOM SEQUENCE OF MULTI_CARRIER DATA SYMBOLS, AND RELATED TRANSMITTER AND RECEIVER

To generate a pseudo-random sequence (PRMS1) of multi-carrier data symbols (DMT0, DMT1, DMT2), a pseudo-random bit sequence (PRBS1) is produced by repetitively generating a pseudo-random sequence of L bits, L being a first integer value (L=4). To create a multi-carrier data symbol (DMT0, DMT1, DMT2) N bits are used, N being a second integer value (N=8). The pseudo-random bit sequence (PRBS1) is subdivided into strings of N' bits, N' being a third integer value larger than N (N'=9), and N bits out of each string of N' bits are used to generate a respective multi-carrier data symbol (DMT0, DMT1, DMT2). N'-N bits out of each string of N' bits are left unused.